

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2005/003345

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/515 A61K31/724 A61P11/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, BIOSIS, EMBASE, SCISEARCH, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/58925 A (BOEHRINGER MANNHEIM GMBH; OLIVA, AMBROGIO; DE CILLIS, GIANPIERO; GRAMS) 30 December 1998 (1998-12-30) claims	1
X	WO 02/34753 A (PFIZER PRODUCTS INC; BRONK, BRIAN, SCOTT; NOE, MARK, CARL; WYTHES, MAR) 2 May 2002 (2002-05-02) page 28, lines 34-36 page 50, line 34 - page 51, line 30	1
X	WO 02/34726 A (PFIZER PRODUCTS INC; NOE, MARK, CARL; REITER, LAWRENCE, ALAN; WYTHES,) 2 May 2002 (2002-05-02) page 24, lines 14-16; claims	1
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\* & \* document member of the same patent family

Date of the actual completion of the international search

13 June 2005

Date of mailing of the international search report

01/07/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Venturini, F

# INTERNATIONAL SEARCH REPORT

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PCT/EP2005/003345

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01/25217 A (F. HOFFMANN-LA ROCHE AG) 12 April 2001 (2001-04-12) the whole document -----	1-6
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A	GRAMS F ET AL: "PYRIMIDINE-2,4,6-TRIONES: A NEW EFFECTIVE AND SELECTIVE CLASS OF MATRIX METALLOPROTEINASE INHIBITORS" BIOLOGICAL CHEMISTRY, vol. 382, no. 8, August 2001 (2001-08), pages 1277-1285, XP008009641 ISSN: 1431-6730 the whole document -----	1-6
A	SAFAK O ET AL: "LOKALE HEMMUNG DER MATRIXMETALLOPROTEINASEAKTIVITAET ZUR VERBESSERUNG DER VERZOEGERTEN WUNDHEILUNG IM TIERMODELL ENHANCEMENT OF IMPAIRED WOUND HEALING IN AN ANIMAL MODEL BY LOCAL INHIBITION OF MATRIX METALLOPROTEINASE ACTIVITY" CHIRURGISCHE FORUM FUER EXPERIMENTELLE UND KLINISCHE FORSCHUNG, BERLIN, DE, 2003, pages 229-231, XP009034656 ISSN: 0303-6227 the whole document -----	1-6

# INTERNATIONAL SEARCH REPORT

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
Although claims 4,6 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2005/003345

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9858925	A	30-12-1998	AU 746853 B2	02-05-2002
			AU 8539198 A	04-01-1999
			BR 9810450 A	05-09-2000
			CA 2294259 A1	30-12-1998
			CN 1267296 A	20-09-2000
			WO 9858925 A1	30-12-1998
			EP 0989982 A1	05-04-2000
			HR 980340 A1	28-02-1999
			JP 2002504916 T	12-02-2002
			MA 24573 A1	31-12-1998
			TR 9903148 T2	21-04-2000
			US 6335332 B1	01-01-2002
			ZA 9805352 A	20-12-1999
WO 0234753	A	02-05-2002	AU 1081302 A	06-05-2002
			BG 107653 A	31-12-2003
			BR 0114913 A	01-07-2003
			CA 2425283 A1	02-05-2002
			CN 1501937 A	02-06-2004
			CZ 20031083 A3	17-03-2004
			EE 200300196 A	15-10-2003
			EP 1332146 A2	06-08-2003
			HR 20030332 A1	30-06-2003
			HU 0301577 A2	28-11-2003
			WO 0234753 A2	02-05-2002
			JP 2004518635 T	24-06-2004
			MX PA03003735 A	28-07-2003
			NO 20031853 A	23-06-2003
			PL 366201 A1	24-01-2005
			SK 4972003 A3	04-05-2004
			US 2003096803 A1	22-05-2003
			ZA 200302190 A	28-04-2004
WO 0234726	A	02-05-2002	AU 1080002 A	06-05-2002
			BG 107651 A	31-12-2003
			BR 0114917 A	01-07-2003
			CA 2425280 A1	02-05-2002
			CZ 20031069 A3	12-05-2004
			EE 200300195 A	15-10-2003
			EP 1332136 A2	06-08-2003
			HR 20030331 A1	30-06-2003
			HU 0302337 A2	28-10-2003
			WO 0234726 A2	02-05-2002
			JP 2004512327 T	22-04-2004
			MX PA03003734 A	28-07-2003
			NO 20031852 A	23-06-2003
			NZ 524774 A	24-09-2004
			PL 362919 A1	02-11-2004
			SK 4872003 A3	03-08-2004
			US 2002132822 A1	19-09-2002
			US 2005107414 A1	19-05-2005
			ZA 200302192 A	05-05-2004
WO 0125217	A	12-04-2001	AT 289595 T	15-03-2005
			AU 768309 B2	04-12-2003
			AU 7784900 A	10-05-2001
			BR 0014678 A	23-07-2002
			CA 2385863 A1	12-04-2001

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PC1/EP2005/003345

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0125217	A	CN 1374954 A ,C	16-10-2002
		CZ 20021535 A3	13-11-2002
		DE 60018301 D1	31-03-2005
		WO 0125217 A1	12-04-2001
		EP 1226128 A1	31-07-2002
		HK 1050198 A1	04-02-2005
		HU 0202832 A2	28-02-2003
		JP 2003511376 T	25-03-2003
		MX PA02003192 A	30-09-2002
		NO 20021380 A	20-03-2002
		NZ 517635 A	28-11-2003
		PL 357385 A1	26-07-2004
		TR 200200858 T2	22-07-2002
		US 6498252 B1	24-12-2002
		ZA 200201754 A	02-06-2003
WO 9723465	A	03-07-1997	DE 19548624 A1
			AT 226575 T
			AU 722513 B2
			AU 1303697 A
			BR 9612232 A
			CA 2240845 A1
			CN 1209123 A
			CZ 9801968 A3
			DE 69624500 D1
			DE 69624500 T2
			DK 869947 T3
			WO 9723465 A1
			EP 0869947 A1
			ES 2184903 T3
			HU 9901065 A2
			IL 125048 A
			JP 2000505069 T
			NO 982901 A
			NZ 325802 A
			PL 327466 A1
			PT 869947 T
			RU 2177475 C2
			SI 869947 T1
			TW 518324 B
			US 6110924 A
			US 6472396 B1
			ZA 9610765 A

## PATENT COOPERATION TREATY

PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Roche Diagnostics GmbH Patent Department Penzberg				
ASK	04. Juli 2005			WN
BK				WJ
BUR	HH	HIL	MI	SR

Applicant's or agent's file reference 22394 WO-WJ	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No. PCT/EP2005/003345	International filing date (day/month/year) 31/03/2005	(Earliest) Priority Date (day/month/year) 01/04/2004
Applicant  F. HOFFMANN-LA ROCHE AG		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☒ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

## 4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

Patent Department (TR-E)		
Case <u>22394</u>	Int.-Nr.	
Literatur erfasst:	Zeichen:	Datum:
Lit.sheet <input checked="" type="checkbox"/> Endnote <input type="checkbox"/>	<u>SMT</u>	<u>04.07.05</u>

## 5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

## 6. With regard to the drawings,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 1a

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Further documents are listed in the continuation of box C.



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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

13 June 2005

Date of mailing of the international search report

01/07/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Venturini, F

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2005/003345

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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# INTERNATIONAL SEARCH REPORT

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Although claims 4,6 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
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3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCHREPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			ZA 9805352 A	20-12-1999
-----				
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			CA 2425283 A1	02-05-2002
			CN 1501937 A	02-06-2004
			CZ 20031083 A3	17-03-2004
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			WO 0234753 A2	02-05-2002
			JP 2004518635 T	24-06-2004
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			NO 20031853 A	23-06-2003
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			SK 4972003 A3	04-05-2004
			US 2003096803 A1	22-05-2003
			ZA 200302190 A	28-04-2004
-----				
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			CZ 20031069 A3	12-05-2004
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			HU 0302337 A2	28-10-2003
			WO 0234726 A2	02-05-2002
			JP 2004512327 T	22-04-2004
			MX PA03003734 A	28-07-2003
			NO 20031852 A	23-06-2003
			NZ 524774 A	24-09-2004
			PL 362919 A1	02-11-2004
			SK 4872003 A3	03-08-2004
			US 2002132822 A1	19-09-2002
			US 2005107414 A1	19-05-2005
			ZA 200302192 A	05-05-2004
-----				
WO 0125217	A	12-04-2001	AT 289595 T	15-03-2005
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			AU 7784900 A	10-05-2001
			BR 0014678 A	23-07-2002
			CA 2385863 A1	12-04-2001

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		CZ 20021535 A3	13-11-2002
		DE 60018301 D1	31-03-2005
		WO 0125217 A1	12-04-2001
		EP 1226128 A1	31-07-2002
		HK 1050198 A1	04-02-2005
		HU 0202832 A2	28-02-2003
		JP 2003511376 T	25-03-2003
		MX PA02003192 A	30-09-2002
		NO 20021380 A	20-03-2002
		NZ 517635 A	28-11-2003
		PL 357385 A1	26-07-2004
		TR 200200858 T2	22-07-2002
		US 6498252 B1	24-12-2002
		ZA 200201754 A	02-06-2003
<hr/>			
WO 9723465	A	03-07-1997	DE 19548624 A1
			AT 226575 T
			AU 722513 B2
			AU 1303697 A
			BR 9612232 A
			CA 2240845 A1
			CN 1209123 A
			CZ 9801968 A3
			DE 69624500 D1
			DE 69624500 T2
			DK 869947 T3
			WO 9723465 A1
			EP 0869947 A1
			ES 2184903 T3
			HU 9901065 A2
			IL 125048 A
			JP 2000505069 T
			NO 982901 A
			NZ 325802 A
			PL 327466 A1
			PT 869947 T
			RU 2177475 C2
			SI 869947 T1
			TW 518324 B
			US 6110924 A
			US 6472396 B1
			ZA 9610765 A
<hr/>			